

**REMARKS**

Claims 1-142 are pending in the application.

**Restriction Requirement**

In the Office Action of September 9, 2004, the Examiner has divided the claims into four (4) groups: Group I, claims 1-54, drawn to a method of treating rheumatoid arthritis, which comprises delivery of a DNA sequence to a host; Group II, claims 55-108, drawn to a method of treating systemic lupus erythematosus, which comprises delivery of a DNA sequence to a host; Group III, claims 109-130, drawn to a method of treating a connective tissue disorder, which comprises delivery of a DNA sequence to a host; and Group IV, claims 131-142, drawn to a mammalian cell comprising a recombinant retroviral vector, which comprises a DNA sequence encoding IRAP.

Applicants traverse this restriction requirement. Reconsideration and withdrawal thereof are earnestly requested. Applicants submit that there is not an undue burden placed upon the Examiner to search and consider all of the claims.

All of the claims in the present application are directed to methods of therapeutic or prophylactic treatment of connective tissue diseases. All of the claims revolve around the concept of using a nucleic acid sequence encoding gene products, which address one or more of the inflammatory, hypertrophic and erosive components of the disease, and combat one or more of these pathological components. Therefore, the claims are linked together so as to form a single invention. Accordingly, all of the claims should be examined together on the merits.

Although Applicants disagree with the Examiner, in order to be responsive to the outstanding restriction requirement, Applicants provisionally elect to prosecute Group I, claims

1-54, drawn to a method of treating rheumatoid arthritis, which comprises delivery of a DNA sequence to a host. Applicant specifically preserves the right to prosecute the non-elected claims.

### Election of Species

In addition to the above-mentioned restriction groups, the Examiner has further placed species restriction on claims of Groups I-IV and indicated that a single disclosed species of vectors must be elected from the group in the respective claims. Applicants traverse this requirement. Reconsideration and withdrawal thereof are earnestly requested.

Various vectors can be used in the presently claimed invention to carry a nucleic acid sequence, which is to be transferred to and expressed in the mammalian host cell. Depending on the several factors such as the kind of the host, the kind of the nucleic acid sequence, and etc., different kinds of vectors can be used for better gene delivery and expression. Therefore, it is not reasonable to divide all of these vectors into individual species. Further, Applicants submit that there is not an undue burden placed upon the Examiner to search and consider all of the species.

Although Applicants disagree with the Examiner, in order to be responsive to the outstanding species requirement, Applicants provisionally elect to prosecute species d) "an adeno-associated vector" in Group I claims 1-54.

The Examiner has also placed species restriction on claims of Groups I-III and indicated that a single disclosed species of DNA sequences encoding a biologically active gene product must be elected from the group in the respective claims. Applicants traverse this requirement. Reconsideration and withdrawal thereof are earnestly requested.

Various nucleic acid sequences can be used in the presently claimed invention to treat connective tissue diseases. To provide therapeutic or prophylactic relief and treat connective tissue diseases, the presently claimed invention deliver a nucleic acid sequence and express a

specific gene *in vivo*. The nucleic acid sequence should encode gene products which address one or more of the inflammatory, hypertrophic and erosive components of the disease. Nucleic acid sequences which combat one or more of these pathological components may be utilized in practicing the presently claimed invention. Therefore, it is not reasonable to divide all of these nucleic acid sequences encoding a biologically active gene product into individual species. Further, Applicants submit that there is not an undue burden placed upon the Examiner to search and consider all of the species.

Although Applicants disagree with the Examiner, in order to be responsive to the outstanding species requirement, Applicants provisionally elect to prosecute species e) "TNF  $\alpha$  soluble receptor" in Group I claims 1-54.

In summary, in response to the outstanding restriction requirement, Applicants provisionally elect to prosecute Group I, claims 1-54 with species d) an adeno-associated vector and e) TNF  $\alpha$  soluble receptor for prosecution on the merits, with traverse. Applicants specifically preserve the right to prosecute the non-elected claims.

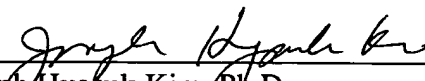
Accordingly, early examination on the merits is respectfully requested.

The Commissioner is authorized to charge JHK Law's Deposit Account No. **502486** for any fees required under 37 CFR §§ 1.16 and 1.17 and to credit any overpayment to said Deposit Account No. **502486**.

Respectfully submitted,

**JHK Law**

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